

ASME Technical Committee on Multibody Systems and Nonlinear Dynamics (TC-MSND)

Monday, February 18, 2013, 11:30 AM (CST)

Minutes

Present members: Aki Mikkola (chair), Harry Dankowicz (vice-chair), Dan Negrut, (recording secretary), Andreas Müller, Ahmed Shabana, Corina Sandu, Carlo Bottasso, Werner Schiehlen, James Critchley, Lawrence Virgin, Walter Lacarbonara, Stefano Lenci, Hiroyuki Sugiyama.

Absent members: Bala Balachandran, Bogdan Epureanu, József Kövecses, Rudranarayan Mukherjee, Wan-Suk Yoo, Javier Cuadrado, Subhash Sinha, Eric Butcher.

Participating Committee Friends: Peter Eberhard, Ronald Aarts.

1. **Call to order**

Meeting called to order by Aki Mikkola at 11:35 AM CST.

2. **Approval of minutes from last meeting**

Minutes of the August 14 2012 ASME TC-MSND meeting in Chicago were discussed briefly. No comments/amendments made. Motion to approve the meeting minutes was seconded and approved unanimously.

3. **Treasurer's report**

Harry Dankowicz reported on the TC-MSND custodial and award accounts. The only expenses charged during FY 2013 through December 31 are for food and beverages and the use of conference phone during the committee meeting at the DFD conference in August in Chicago. As of December 31, balances are: \$24896.43 in the custodial account, \$53,300.93 in the d'Alembert account, and \$53,324.37 in the Lyapunov account.

Although the books for the 2011 IDETC conference organized in Washington D.C. have been closed, surplus revenue has yet to be dispersed to individual committees and no information on amounts to be distributed has been shared. The books have yet to be closed for the 2012 IDETC conference. Based on a budgeted surplus of \$66k, the DFD activity could expect \$1,437. The final amount will be deposited in a separate account, administered jointly by TCVS and TC-MSND.

4. **Conference reports**

- 2013 MSNDC – Dan Negrut provided an update on the progress of organizing the 2013 9th International Conference on Multibody Systems, Nonlinear Dynamics, and Control (MSNDC) to be held in Portland, Oregon between August 4 and August 7 2013. There were 191 abstracts submitted and 162 draft papers submitted.

A decision was made not to accept submissions of “Briefs for Presentation” associated with “Technical Presentation Only” participation at the conference. It was mentioned that the Briefs for Presentation mechanism had been introduced by the general IDETC organizers to allow individual subconferences to accommodate committee-specific preferences. Dan Negrut indicated that a symposium is being planned, called “Multibody System Dynamics: Global Perspectives, 2013,” that will discuss the state of Multibody System Dynamics discipline in several geographical regions of the world. The panelists invited include Oliver Bauchau (China) and Jin Choi (S. Korea), Jorge Ambrosio and Carlo Bottasso (Europe), and John McPhee and Kurt Anderson (North America).

Finally, Dan Negrut will organize a workshop called “Parallel Computing on Graphics Processing Unit (GPU) Cards: An Introduction and Applications in Mechanical Engineering.”

- 2014 IDETC/DFD – Corina Sandu and Dane Quinn are co-chairing the organization of the 2nd DFD meeting in Buffalo, NY. Corina indicated that a call is in preparation. Once available it will be widely distributed by the organizing committee.

5. **JCND journal report**

Ahmed Shabana (Editor-in-chief) provided a brief report on the Journal of Computational and Nonlinear Dynamics. In 2012, the journal received 234 manuscripts. This is more than double the number of submissions from two years ago (121 manuscripts were submitted in 2010). The current acceptance rate is around 15%. The ASME has increased the page journal allocation from 550 pages/year to 700 pages/year, effective July 1, 2012. The journal was included in the

Journal Citation Reports (JCR) in 2009, and its Impact Factor from 2011 is 0.85, an increase from the previous year's 0.571. Several special issues are lined up in the immediate future: on rail dynamics, flexible multibody dynamics, and multibody system dynamics formulations. Several other special issues are being discussed as possible in the near future: wind energy, vehicle dynamics. Ahmed Shabana indicated that there is a need for a special issue on Nonlinear Dynamics and volunteers are sought to this end.

6. **Sub-committee reports**

a. **Honors Committee (A. Mikkola)**

The TC-MSND Honors committee is preparing three nominations for society and division level awards. At the moment, two of three nominations have been submitted. The honors committee is planning to recommend two to three Fellows for the next ASME open call.

b. **Awards Committee (H. Dankowicz)**

Harry Dankowicz reported on the ongoing effort to elevate the d'Alembert and Lyapunov awards to society level awards. The outcome of this process remains uncertain. It is hoped that further information will become available following the April meeting of the ASME Honors Committee.

Professor Ahmed Shabana and Professor J.M.T. Thompson were announced as the winners of the 2013 d'Alembert and Lyapunov awards, respectively. There were three candidates for the d'Alembert award and two candidates for the Lyapunov award. Harry Dankowicz remarked that publishing the call for nominations for these awards in journals appeared to have yielded virtually no response. Instead, personal contact seems to have worked best.

c. **Publicity and Information Committee (A. Müller)**

Andreas Müller set up LinkedIn (<http://www.linkedin.com/groups/ASME-MSND-Technical-Committee-4568881>) and Facebook (<https://www.facebook.com/ASME.MSND/info>) sites for our committee. The LinkedIn account has shown some minimal activity with two recent job postings. The Facebook account sees less traffic.

7. **Other business**

Dan Negrut suggested to organize the next committee meeting at a pizza place for a more relaxed atmosphere. Concerns were raised about spending money on this activity and in relation to the ability of remote participants to dial in.

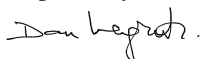
Minutes from August 2011 and February 2012 were noted as missing from the committee webpage; Dan Negrut to address this issue.

The DED Executive Committee is requesting proposals on Technical Committee Initiatives. This opportunity could be used to promote DFD or other similar kind of activities (see also the enclosed document).

Ahmed Shabana suggested pushing the entire ASME International Design Engineering Technical Conferences (IDETC) and Computers and Information in Engineering Conference (CIE) back in the September/October timeframe. This would allow improved participation from Europe, where most of our colleagues are in the middle of their summer vacation in early-mid August.

The meeting adjourned at 12:45 PM CST.

Respectfully submitted,



Dan Negrut
MSND-TC Secretary